



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,674	08/01/2003	Frank Michael Kraft	15609-019001 / 2003P00434	2696
32864	7590	02/15/2006	EXAMINER	
FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			TIMBLIN, ROBERT M	
			ART UNIT	PAPER NUMBER
			2167	
DATE MAILED: 02/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/632,674

Applicant(s)

KRAFT, FRANK MICHAEL

Examiner

Robert M. Timblin

Art Unit

2167

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/1/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

This action corresponds to application 10/632,674 filed 8/1/2003.

Claims 1-9 have been examined and are pending.

### *Claim Objections*

Claims 4, 5, and 7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim See MPEP § 608.01(n). Accordingly, these claims have not been further treated on the merits.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Saito et al.** ('Saito' hereinafter) (US Patent 5,655,075) in view of **Bosik, Barry S.** ("Finite state machine based formal methods in protocol conformance testing: from theory to implementation).

With respect to claim 1, **Saito** teaches A computer-implemented method to support in developing a process specification for a collaborative process involving distributed computer-based participant systems exchanging messages through an asynchronous messaging network, the method embodied by a computer program product executable by a computer system and causing, when executed, said computer system to carry out the steps of:

**'information on local states and local state transitions in relation to each participant system'** as in figures 2a-2b, the ovals that represent individual states. The arrows connecting the ovals represent the state transitions (col. 3 lines 28-35). This information is embodied in figure 3 as a specification storage form (col. 3 lines 47-54).

**'information specifying in relation to each local state transition, starting and target local states of the corresponding participant system and events triggering, and resulting from, the respective local state transition'** as state transitions ( col. 6, lines 27-54 and figures 2a-2b and 3).

**'processing said information retrieved from said first storage location to generate, and store in a second storage location, information on collaboration states and collaboration state transitions of said process'** (figs 2a-2b and 3)

**'collaboration states defined by a local state for each participant system'** as state names (col. 3 lines 27-34)

**'a communication status of each message exchangeable between said participant systems'** as state names READY, WAIT, REGISTER, IDLE (col. 3 lines 29-34 and figures 2a-2b and 3).

**'collaboration state transitions being determined by applying said local state transitions to said collaboration states'** as individual states applying state transitions via connecting arrows (col. 3, lines 27-46 and figures 2a-2b).

**'processing said information retrieved from said second storage location to generate information on incompletely specified terminal collaboration states among said collaboration states, an incompletely specified terminal collaboration state being a terminal collaboration state in which at least one message is underway between said participant systems'** as the state names column of figure 3.

**'generating a result data object containing information on every incompletely specified terminal collaboration state found'** as all sets shown in the specification storage form (col. 3, lines 46-54 and figure 3).

Saito fails to teach a first storage location (of line 7 in claim 1) and upon generation and storage of said information on said collaboration states and collaboration state transitions, retrieving that information from said second storage location (lines 19-21 of claim 1).

**Bosik**, however, teaches **'a first storage location'** as the storage location labeled *test scripts* (figure 19, page 28-29).

**'upon generation and storage of said information on said collaboration states and collaboration state transitions, retrieving that information from said second storage location'** as retrieving results and analysis from the second database labeled *results and analysis* (figure 19 and page 28-29).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine the teachings of the cited references

because the teachings of **Bosik** would have provided Saito's system with a computer system for implementing a specification for a collaborative process (figures 1, and 19, pages 8 and 28, **Bosik**).

With respect to claim 2, **Saito** teaches '**storing said result data object in a third storage location**' as a specification storage form (col. 3 lines 46-54 figure 3).

With respect to claim 3, **Bosik** teaches '**providing said result data object to a graphical output device to visually present on a display a presentation object indicating every incompletely specified terminal collaboration state found**' as a operator console and a user interface (page 28 figures 19-20).

With respect to claim 4, **Saito** teaches '**communication status is a binary status indicating whether or not the respective message is underway between said participant systems**' as a "+" or "-" sign representing transmission or reception (col. 3 lines 50-54).

With respect to claim 5, **Saito** teaches '**information on a set of virtual global states, said virtual global states being defined each by a local state for each participant system and a communication status of each message, said set of virtual global states comprising states of any combination of local states of said participant systems and communication statuses of said messages**' (figures 2a-b and 3).

With respect to claim 6, **Saito** teaches **'virtual global states are represented each by a global state vector composed of first global state vector elements indicating a local state for each participant system and one or more second global state vector elements, one in relation to each message, each second global state vector element indicating a communication status of the respective message, said set of virtual global states comprising states of any combination of values of said first and second global state vector elements'** (figure 3).

With respect to claims 7-9, the limitations of these claims have been recited as set forth from claims 1-6 above. With claims 7-9 containing essentially the same subject matter as claims 1-6 above, these claims have been rejected for the same reasons.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,212,653 B1 issued to **Boivin et al.** on 4/3/2001. The subject matter disclosed therein is pertinent to that of claims (i.e. 1-9 storing execution of events such as state transitions).

US Patent 6,952,660 B1 issued to **Matheson** on 10/04/2005. The subject matter disclosed therein is pertinent to that of claims 1-9 (i.e. collaboration information).

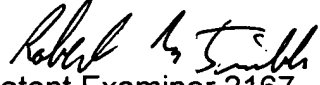
### Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M. Timblin whose telephone number is 571-272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jean R. Homere can be reached on 571-272-3780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RMT  
2/03/2006

Robert M. Timblin  
  
Patent Examiner 2167

  
JEAN HOMERE  
SUPERVISORY PATENT EXAMINER